

ABSTRACT

A method of minimizing a risk of damage to human tissue, caused by an exposure to an amount of laser radiation in excess of a maximum permissible exposure level performed in an optical transceiver having at least two photodetectors and at least two laser transmitters. The method involves monitoring at least one of the photodetectors for receipt of an optical signal; determining if a received optical signal satisfies at least one expected activity criterion; and, if the received optical signal does not satisfy the at least one expected activity criterion, determining that an eye safety fault condition exists and causing a shut down of at least one of the at least two laser transmitters. An optical transceiver with multiple optical devices includes a transmit channel; a receiver channel; an eye safety channel; and a controller, coupled to the transmit channel and eye safety channel. The controller is configured to receive information based upon a monitoring of the eye safety channel and shut down the transmit channel when the information indicates that an eye safety fault has occurred.

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